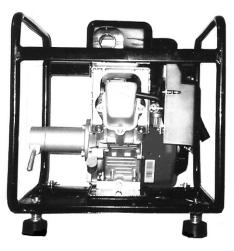


CONCRETE VIBRATOR 6.5 HP BRIGGS & STRATTON[®] ENGINE

Model 94344

ASSEMBLY AND OPERATING INSTRUCTIONS



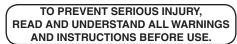
Do to continuing improvements, actual product may differ slightly from the product described herein.



A. You do not put <u>engine oil</u> in the Engine's crankcase prior to its first use. Before each use, check the oil level. Never run the Engine with low or no engine oil. Running the Engine with low or no oil will permanently damage the unit.

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PRODUCT SPECIFICATIONS

Product Compatibility	For Use With Harbor Freight Tools' Model 94345 Concrete Vibrator Head/Hose (Not Included)
Engine Type	6.5 HP Briggs & Stratton®Recoil Start Unleaded Gasoline Powered Engine Approval: 2006 CA Emissions Approval 2006 E.P.A. Phase II Regulations
Output Coupler	1-7/8" Inside Diameter
Shaft Connector	1" Diameter
Drive Type	Direct Driven Output
Vibration Isolators	Four Rubber Feet On Frame
Overall Dimensions	17-1/2" L x 17-3/4" W x 18-3/4" H
Unit Weight	61.6 Pounds

SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

GENERAL SAFETY RULES AND PRECAUTIONS

WARNING! READ AND UNDERSTAND ALL INSTRUCTIONS Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury. SAVE THESE INSTRUCTIONS

WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.



Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.

3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

PERSONAL SAFETY

- 1. Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- 2. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- 3. Avoid accidental starting. Be sure the Gasoline Engine's Power Switch is in its "OFF" position before moving the Concrete Vibrator *and* before performing any service, maintenance, or cleaning procedures on the unit.
- 4. **Remove adjusting keys or wrenches before turning the Concrete Vibrator on.** A wrench or a key that is left attached to a rotating part of the machine may result in personal injury.
- 5. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.
- 6. Use safety equipment. Always wear eye protection. Always wear ANSIapproved safety impact goggles when using this product. Hearing protection, helmet, and steel toed shoes must also be used.

TOOL USE AND CARE

- 1. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- 2. Do not use the Concrete Vibrator if the Gasoline Engine's Power Switch does not turn it on or off. Any tool that cannot be controlled with its power switch is dangerous and must be replaced.
- 3. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- 4. **Maintain tools with care.** Properly maintained tools and equipment are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.

- 5. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- 6. Use only accessories that are recommended by the manufacturer for your **model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE

- 1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
- 2. When servicing a tool, use only identical replacement parts. Follow instructions in the *"Inspection, Maintenance, And Cleaning"* section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES AND PRECAUTIONS

- 1. WARNING! Your Warranty is voided if:
 - A. You do not put <u>engine oil</u> in the Engine's crankcase prior to its first use. Before each use, check the oil level. Never run the Engine with low or no engine oil. Running the Engine with low or no oil will permanently damage the unit. Refer to the Engine manufacturer's product manual (included) for complete Engine service and maintenance instructions.
- 2. This Concrete Vibrator is designed for use only with the Harbor Freight Tools' model <u>94345 Concrete Vibrator Head and Hose</u>. Do not attempt to use the Concrete Vibrator with any other type of Head and Hose.
- 3. **Maintain labels and nameplates on the Concrete Vibrator.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 4. Industrial applications must follow OSHA guidelines.
- 5. Never leave the Concrete Vibrator unattended when its Engine (16) is running. Turn off the Engine, and wait until it completely stops rotating before leaving.

- 6. **Do not allow children and other unauthorized people to handle or play with the Concrete Vibrator.**
- 7. **DANGER! This Concrete Vibrator is designed for outdoor use only.** Do not operate the Vibrator in a closed area or in a poorly ventilated area. When running, the Engine (16) of this Vibrator produces carbon monoxide, a colorless, odorless, toxic fume that, when inhaled, can cause serious personal injury or death. Whenever possible, use a carbon monoxide detector (not included) to detect excessive carbon monoxide fumes in the work area and in the surrounding area.
- 8. **Do not force the Concrete Vibrator.** This machine will do the work better and safer at the speed and capacity for which it was designed.
- 9. **Never stand on the Concrete Vibrator.** Standing on the Vibrator could tip the tool, possibly causing personal injury and/or property damage.
- 10. **Use the right tool for the job.** Do not attempt to force small tools and equipment to do the work of larger industrial tools and equipment. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool, and do not use this tool for a purpose for which it was not intended.
- 11. **Store idle tools and equipment.** When not in use, the Concrete Vibrator must be stored in a dry location to inhibit rust. Always lock up the tool and keep out of reach of children and other unauthorized people.
- 12. **Do not operate this tool if under the influence of alcohol or drugs.** Read warning labels if taking prescription medicine to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
- 13. **WARNING!** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference to or failure of the pacemaker.
- 14. **WARNING!** The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be under stood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

FIRE AND EXPLOSION PRECAUTIONS

1. **Gasoline fuel and fumes are flammable, and potentially explosive.** Use proper fuel storage and handling procedures. Always have multiple ABC class fire extinguishers nearby.

- 2. Keep the Concrete Vibrator and surrounding areas clean at all times.
- 3. When spills of fuel or oil occur, they must be cleaned up immediately. Dispose of fluids and cleaning materials as per any local, state, or federal codes and regulations. Store oil rags in a covered metal container.
- 4. Never store fuel or other flammable materials near the Concrete Vibrator.
- 5. **Do not smoke, or allow sparks, flames, or other sources of ignition around the Concrete Vibrator.**
- 6. Keep grounded conductive objects, such as tools, away from exposed, live electrical parts and connections to avoid sparking or arcing. These events could ignite fumes or vapors.
- 7. **Do not refill the Fuel Tank while the Engine is running or while the Engine is still hot.** Do not operate the Concrete Vibrator with known leaks in the fuel system.
- 8. Use only Engine manufacturer recommended fuel and oil.

MECHANICAL PRECAUTIONS

- 1. Prior to performing service, maintenance, or cleaning procedures, always make sure the Gasoline Engine's Power Switch is in its "OFF" position. Allow the Engine to completely cool. Then, remove the spark plug from the Engine.
- 2. Do not alter or adjust any part of the Concrete Vibrator or Engine that is assembled and supplied by the manufacturer.
- 3. Always follow and complete scheduled Concrete Vibrator and Engine maintenance.

CHEMICAL PRECAUTIONS

- 1. Avoid contact with hot fuel, oil, exhaust fumes, and solid surfaces.
- 2. Avoid body contact with fuels, oils, and lubricants used in the Concrete Vibrator and Engine. If swallowed, seek medical treatment immediately. Do not induce vomiting if fuel is swallowed. For skin contact, immediately wash with soap and water. For eye contact, immediately flush eyes with clean water.

NOISE PRECAUTIONS

1. **Prolonged exposure to noise levels above 85 dBA is hazardous to hearing.** Always wear hearing protection when operating or working around the Concrete Vibrator when it is running.

VIBRATION HAZARD

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

- 1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any medical or physical symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
- 2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
- 3. Wear suitable gloves to reduce the vibration effects on the user.
- 4. Use tools with the lowest vibration when there is a choice between different processes.
- 5. Include vibration-free periods each day of work.
- 6. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
- 7. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.

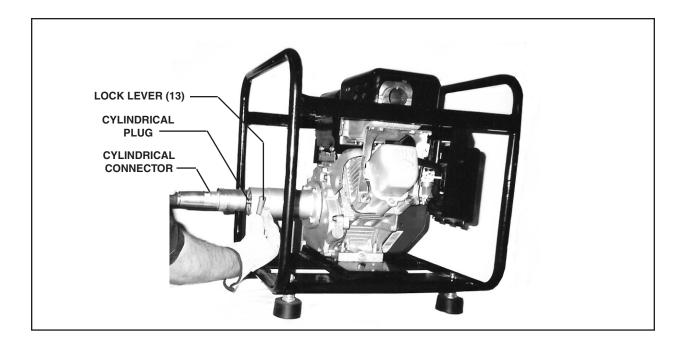
UNPACKING

When unpacking, check to make sure all the parts shown on the **Parts List on page 13** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

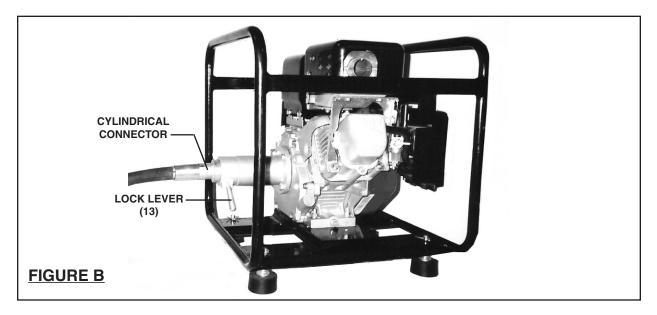
ASSEMBLY INSTRUCTIONS

To Attach The Head And Flexible Hose To The Concrete Vibrator:

- 1. **NOTE:** This Concrete Vibrator is designed for use *only* with the **model 94345 Concrete Vibrator Head and Hose** (available from Harbor Freight Tools). Do not attempt to use the Concrete Vibrator with any other type of Head and Hose.
- 2. Turn the Lock Lever (13) up all the way. (See Figure A.)
- Insert the Cylindrical Plug and Cylindrical Connector of the Head and Hose into the Coupler (2) of the Concrete Vibrator. Make sure the grooves on the Cylindrical Plug align with the grooves inside the Coupler. Also, make sure to align the notches in the Cylindrical Connector with the Lock Lever (13). (See Figure A.)



4. Turn the Lock Lever (13) downward until it locks the Cylindrical Connector firmly in place. **(See Figure B.)**



PRE-OPERATING INSTRUCTIONS

WARNING! Always make sure the Engine's Power Switch is in its "**OFF**" position prior to performing any service, maintenance, or cleaning of the Concrete Vibrator.

To Add Engine Oil:

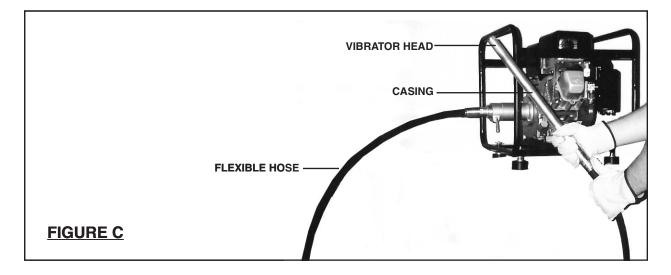
- IMPORTANT! Prior to first using the Concrete Vibrator, the Engine <u>MUST</u> be filled with a high quality 30W grade engine oil.
 (See Engine manufacturer's manual for complete instructions.)
- 2. To do so, *unscrew* and remove the Engine Oil Dipstick. Pour approximately 3/4 quart of engine oil into the Dipstick Hole. **Do not overfill.**
- 3. Clean the Oil Dipstick. Then screw the Dipstick fully back into the Dipstick Hole. Unscrew and remove the Oil Dipstick again, and observe the level of engine oil on the Dipstick. The oil level should appear between the "**MINIMUM**" and "**MAXIMUM**" indicator marks on the Oil Dipstick.
- If necessary, continue adding engine oil, while rechecking the Oil Dipstick, until the oil level reaches the "MAXIMUM" indicator on the Oil Dipstick.
 <u>Do not exceed the "MAXIMUM" indicator mark on the Oil Dipstick.</u>
- 5. When finished adding engine oil, carefully screw the Oil Dipstick back into the Dipstick Hole.

To Fill The Fuel Tank:

- Prior to first using the Concrete Vibrator, the Engine's Fuel Tank <u>MUST</u> be filled with unleaded gasoline.
 (See Engine manufacturer's manual for complete instructions.)
- To do so, remove the Fuel Tank Cap and fill the Fuel Tank with unleaded gasoline. Then, replace the Fuel Tank Cap. Thereafter, check the Fuel Tank for the amount of unleaded gasoline. When necessary, refill the Fuel Tank. (See Engine manufacturer's manual for complete instructions.)

OPERATING INSTRUCTIONS

- 1. With assistance, carry the Concrete Vibrator by its Frame (15), with the Vibrator Head and Flexible Hose, to where the cement is being poured. Place the unit on a flat, level, ground surface away from water and the concrete.
- After pouring the concrete, grip the Vibrator Head and Flexible Hose by its Casing. Then, start the Engine (16) of the Concrete Vibrator. (See Engine manufacturer's manual for complete instructions.)
- 3. The Vibrator Head should begin to move. If it does not move, tap it until the vibration begins. **(See Figure C.)**
- 4. Insert the Vibrator Head and Flexible Hose assembly into the concrete. **(See Figure C.)**
- 5. Move the Vibrator Head up and down in the concrete to remove air bubbles. **(See Figure C.)**
- 6. **IMPORTANT:** Never allow concrete to enter the Vibrator Head assembly, as this could damage the bearings inside the Head. **(See Figure C.)**



- 7. When finished using the Concrete Vibrator, remove the Vibrator Head assembly from the concrete. Turn off the Engine (16) of the unit. Disconnect the Vibrator Head and Flexible Hose from the Concrete Vibrator, and use a garden hose to clean the Vibrator Head and Flexible Hose of all concrete and debris. (See Figure C.)
- 8. Allow the Engine (16) of the Concrete Vibrator to completely cool. Then store the Concrete Vibrator, Vibrator Head, and Flexible Hose in a clean, dry, safe location out of reach of children and other unauthorized people. (See Figure C.)

Engine Start Difficulty or	Cause	Solution	
Lack of Power			
Fuel System	1. Insufficient fuel.	1. Add fuel.	
	2. Fuel filter requires	2. Clean the fuel filter or	
	cleaning or replacement.	replace with a new fuel filter.	
	3. Fuel is contaminated.	3. Replace fuel in both fuel	
		tank and carburetor.	
Control System	1. Ignition switch (equipment	1. Turn the ignition switch to	
	side) is at "OFF" position.	"ON".	
	2. Choke is at "OPEN"	2. Turn the choke lever to	
	position when the engine is	"CLOSED" position.	
	warm.		
Ignition System	1. Spark plug faulty fouled or	1. Clean or replace spark	
	improperly gapped.	plug.	
	2. Spark plug covered with	2. Dry the spark plug and	
	too much gasoline.	restart the engine.	
Other	1. Many possibilities.	1. Take the engine to a qualified service technician.	

TROUBLESHOOTING - VIBRATOR HEAD AND FLEXIBLE HOSE

Problem	Possible Cause	Possible Solution
Engine runs, but Vibrator Head will not vibrate.	 Excessive dried concrete or debris on Vibrator Head. 	1. Tap Vibrator Head until it begins to vibrate.
	2. Excessive kinks in Flexible Hose.	2. Straighten Flexible Hose to remove kinks.
	 Cylindrical Plug and/or Cylindrical Connector not properly connected to Coupler on Concrete Vibrator unit. 	 Shut down Engine, and properly reconnect Cylindrical Plug and Cylindrical Connector to Coupler on Concrete Vibrator.
	 Bearings within Vibrator Head dam- aged. 	 Take the Vibrator Head and Flexible Hose to a qualified service technician for repair or replacement.

INSPECTION, MAINTENANCE, AND CLEANING

- 1. **DANGER!** Make sure the Engine's Power Switch of the Concrete Vibrator is in its "**OFF**" position prior to performing any inspection, maintenance, or cleaning of the machine.
- 2. **Before each use**, inspect the general condition of the Concrete Vibrator. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect the safe operation of the Concrete Vibrator. If abnormal noise occurs, have the problem corrected before further use.

Do not use damaged equipment.

- 3. Before each use, check the Engine oil level. If necessary, fill the crankcase of the Engine with the proper amount and type of engine oil. <u>Refer to the Engine</u> <u>manufacturer's manual for all inspection, maintenance, and cleaning</u> <u>instructions.</u>
- 4. **NOTE:** Always dispose of old engine oil in accordance with local, state, and federal regulations.
- 5. **To clean**, use a clean cloth with a mild detergent. Do not introduce water into the carburetor or other open orifices of the Engine. Also, use compressed air to blow off excessive dirt and debris.
- 6. **CAUTION!** All maintenance, service, or repairs not mentioned in this manual must only be performed by a qualified service technician.

PLEASE READ THE FOLLOWING CAREFULLY

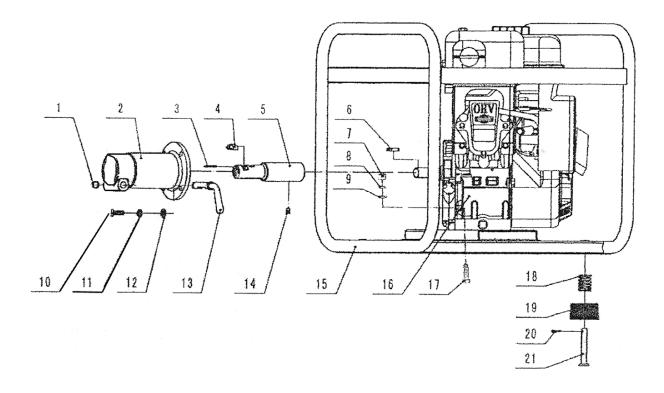
THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISKS AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

PARTS LIST AND ASSEMBLY DIAGRAM

Part	Description	Qty.
1	Shaft Circlip	1
2	Coupler	1
3	Pin	1
4	Clutch Block	1
5	Shaft Connector	1
6	Кеу	1
7	Nut	4

Part	Description	Qty.
8	Flexible Washer	4
9	Washer	4
10	Bolt	4
11	Elastic Washer	4
12	Washer	4
13	Lock Lever	1
14	Lock Screw	1

Part	Description	Qty.
15	Frame	1
16	Engine (B & S 6.5 HP)	1
17	Bolt	4
18	Spring	4
19	Rubber Foot	4
20	Split Pin	4
21	Connecting Rod	4



NOTE: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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